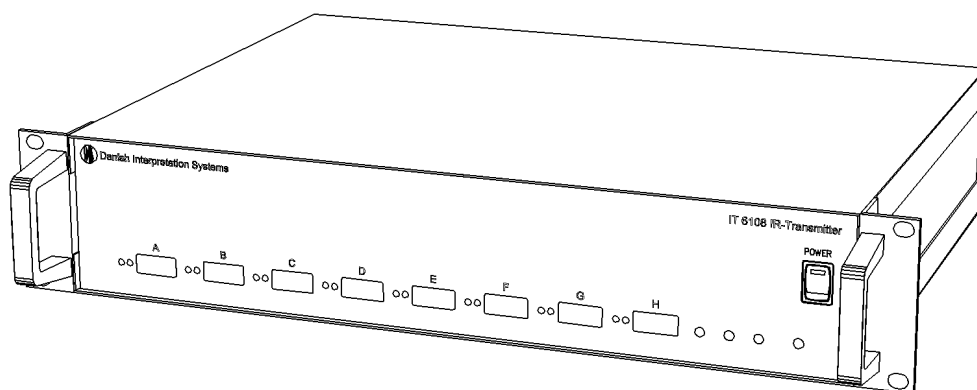


DCS 6000



User Manual

Digital Conference System



IT 6108 Infrared Transmitter

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Document version

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Important

Compliance

The equipment has been tested and found to comply with the limits of the CE test. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. The equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the user manual it may cause harmful interference to radio communications.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Main lead wire ring

The wires in the main lead are coloured in accordance with the following codes:

Green-and-yellow	Earth
Blue	Neutral
Brown	Live

The colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, so please proceed as follows:

The green-and-yellow wire must be connected to the terminal in the plug marked with the letter E or with the safety earth symbol or marked with green-and-yellow colour. The blue wire must be connected to the terminal marked with the letter N or marked with black colour. The brown wire must be connected to the terminal marked with the letter L or marked with red colour.

The equipment must be connected to earth

Safety

Check that the operating voltage of the unit is identical with the voltage of your local power supply. If a voltage conversion is required, consult your DIS dealer or qualified personnel.

Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it further.

Unplug the unit from the wall outlet or set the Main Power switch to OFF if it is not used for several days.

To disconnect the cord, pull it out holding the plug. Never pull the cord itself.

Installation precautions

Allow adequate air circulation to prevent internal heat built-up. Do not place the unit on a surface (rugs, blankets, etc.) that may block the ventilation holes.

Do not install the unit in a location near heat sources such as radiators or air ducts, or in a place exposed to direct sunlight, excessive dust or humidity, mechanical vibration or shock.

To avoid moisture condensations do not install the unit where the temperature may rise rapidly.

Cleaning

To keep the cabinet in its original condition, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use organic solvents such as thinners or abrasive cleaners since these will damage the cabinet.

Repacking

Save the original shipping carton and packing material; they will become handy if you ever have to ship the unit. For maximum protection, re-pack the unit as originally packed from the factory.

If not supplied with the equipment, a complete transportation and storage box system is available

from DIS. We recommend you to use this system for long-term protection and care.

Warranty

The individual units in the DCS 6000 system are minimum covered by 12 months warranty against defects in materials or workmanship.

Description of the system

Features

The DCS 6000 system is a “State of the Art” fully digital integrated interpretation, discussion and voting system offering interpretation, language distribution, and conference microphone and voting facilities with attendance check with Chip Card TM.

Although the IT 6108 Infrared Transmitter is transmitting the sound analogue it is considered as part of the DCS 6000 system.

System components

The DCS 6000 system consists of various units.

Central equipment

PC 6000	Personal Computer
CU 6000	Central Unit with built-in network controller and power supply
CU 6010	Central Unit with built-in network controller and power supply

EX 6010	Extension Power supply
AO 6008	Audio Output box
IT 6108	Infrared Transmitter

Interpreter and delegate equipment

IS 6132P	Interpreter Set
LS 6032P	Interpreter Loudspeaker
CS 6032P	Channel selector (portable)
CS 6032F	Channel Selector (flush mounted)
DM 6010P	Delegate Unit (portable)
DM 6070P	Delegate Unit (portable) with two built in channel selectors
CM 6010P	Chairman Unit (portable)
CM 6060P	Chairman Unit (portable) with one built in channel selectors
MU 6040	Electronic unit for use with customised front plate with Loudspeaker, Microphone and Buttons

Unit operating instructions

IT 6108 Infrared Transmitter

Features

The control console is be able to transmit up to eight sound channels (FM) to different carrier frequencies,

- Every transmitting channel can be separately switched on.
- Transmitting channels on which no interpreter sound is present automatically transmit the original sound
- All transmitting channels can be listened to directly at the transmitter via a receiver (IR test diodes).
- Up to 20 DIS series IR15-xx Infrared Radiators can be directly linked up.
- Cascade coupling feature for additional languages

Description

The IT 6108 Infrared Transmitter is designed in a standard 2HE 19" box.

The IT 6108 Infrared Transmitter is part of the DCS6000 which serves the cordless sound transmission with the aid of infrared light.

The sound signal is thereby converted into a frequency-modulated infrared light signal and emitted via transmitting diodes. With the DIS series of IR15-xx Infrared Receivers the light signal is recorded and re-converted into a sound signal, which can then be heard on a set of headphones.

Different frequencies of up to 8 channels can be transmitted simultaneously with an FM narrow band modulation. The IT 6108 Infrared Transmitter is used for modulating the sound signals on the different carrier frequencies and for amplifying.

The IT 6108 Infrared Transmitter is designed in a standard 2HU 19" box.

Seven interpreted languages and the original or eight interpreted languages can be transmitted. Two or more IT 6108 can be cascade coupled for adding more interpreted languages to the system.

User Controls, indications & connectors

Front plate controls

The IT 6108 Infrared Transmitter features the following controls and indications:

❑ **Power ON SWITCH**

On the front right-hand side of the IT 6108 there is a POWER switch for switching power ON.

❑ **Power ON led**

On the front right-hand side of the IT 6108 there is a green POWER ON LED which shows whether the unit is switched on.

❑ **Test LED (3x)**

These LED's are used for testing the IR transmission on the front of the IT 6108, by using an IR15-xx IR-receiver

Channel setting elements

The operating elements of the eight infrared channels are located on the front side of the console. Each infrared channel consists of the following:

❑ **AF LED**

This LED is flashing if the original voice or interpreter voice is present at the channel.

❑ **ON LED**

This LED lights if the channel is switched ON by use of the DIP switch

❑ **DIP switch**

This DIS has 4 individual switches:

1. ON / OFF switch. If set to ON this channels is transmitting the channel selected by the Rotary Switch.
2. Not used
3. Not used. **Has to be in ON position always**
4. Frequency band switch. In ON position; CH 0 to CH 13. In OFF position CH 14 to CH29. When using with IR15-06 and IR15-12 this switch has always to be in ON position.

❑ **Rotary Switch**

This switch is used for channel setting. This can be used to set the channels independently of the frequency band switch.

Connectors

The IT 6108 contains the following sockets on the rear side:

❑ **Power connector**

Connection for main power with an integrated ON / OFF switch.

❑ **Input (A-H)**

Eight XLR sockets feeding the analogue sound to the transmitter.

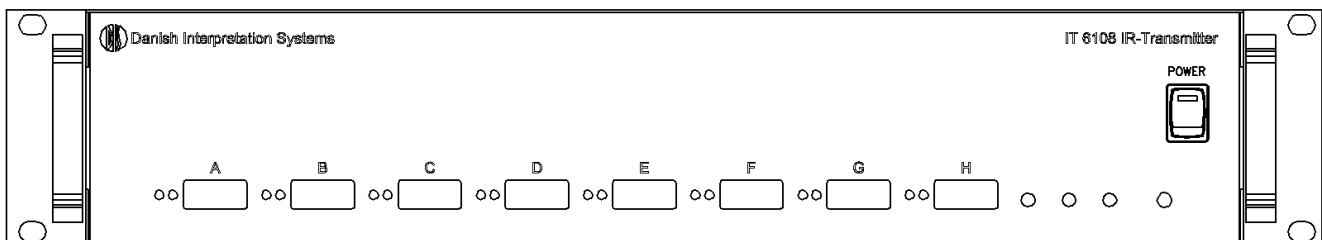
❑ **LINK**

A BNC socket for the cascading with other IT 6108

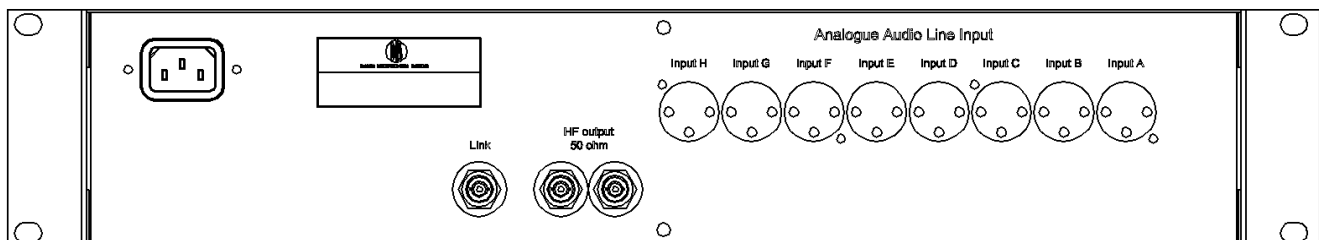
❑ **HF output 50 ohm**

Two BNC sockets for connecting to DIS series RA15-xx Infrared Radiators. Up to 10 radiators can be directly connected to these sockets.

Front plate layout



Back panel layout



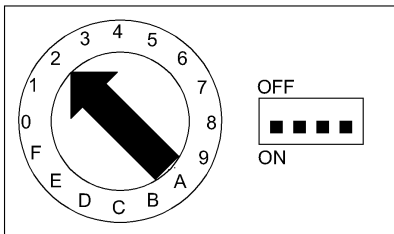
System settings

The output channels are each set by use on the *DIP Switch* and the *Rotary Switch* as shown in the following figures.

The channel setting are normally done that the first channel (A) is set to CH 0 (original) the next (B) to CH1 and so on.

Setting CH 0 to CH 13

For using CH 0 to CH 13 set the DIP switch as shown in the figure.



<- CH.1 IS SELECTED

For each of the 8 channels set the wanted Channel Number by turning the Rotary Switch to the wanted channel. The numbers on the Rotary switch corresponds to a Channel Number as show in the figure below.

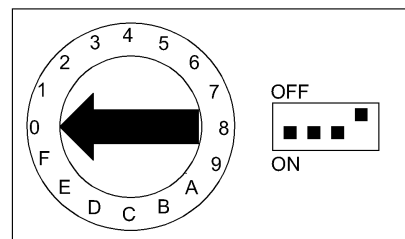
If a channel is not in use set the DIP switch for that channel to OFF.

Important: No channels on any IT 6108 in the system must be set to the same Channel Number

Important: Do not set the rotary switch to position B at any of the rotary switches where the DIP switch is set for “channel 0 to 13”, as it will make the transmitter not working

Setting CH 14 to CH 29

For using CH 14 to CH 29 set the DIP switch as shown in the figure.



<- CH.14 IS SELECTED

For each of the 8 channels set the wanted Channel Number by turning the Rotary Switch to the wanted channel. The numbers on the Rotary switch corresponds to a Channel Number as show in the figure below.

If a channel is not in use set the DIP switch for that channel to OFF.

Important: No channels on any IT 6108 in the system must be set to the same Channel Number

Self adhesive label

The following self adhesive label is given a quick overview of the channel setting. The label is attached the User Manual. Please place the label as you wish.

Switch	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	
Channel	—	0	1	2	3	4	5	6	7	8	9	×	10	11	12	13	□ □ □ □ ■ ■ ■ ■
	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	□ □ □ ■ ■ ■ ■ □


Danish Interpretation Systems

Set unused channels to "Off" position

Channel Off On

□ □ □ □

□ □ □ □

Channel selection

Normal Operation

Powering up

Switch on power at the IT 6108. After powering up, the ON LED will light up.

Check with an IR15-xx Infrared Receiver holding in front of the 3 test LED's, that there is sound on all the channels set to ON.

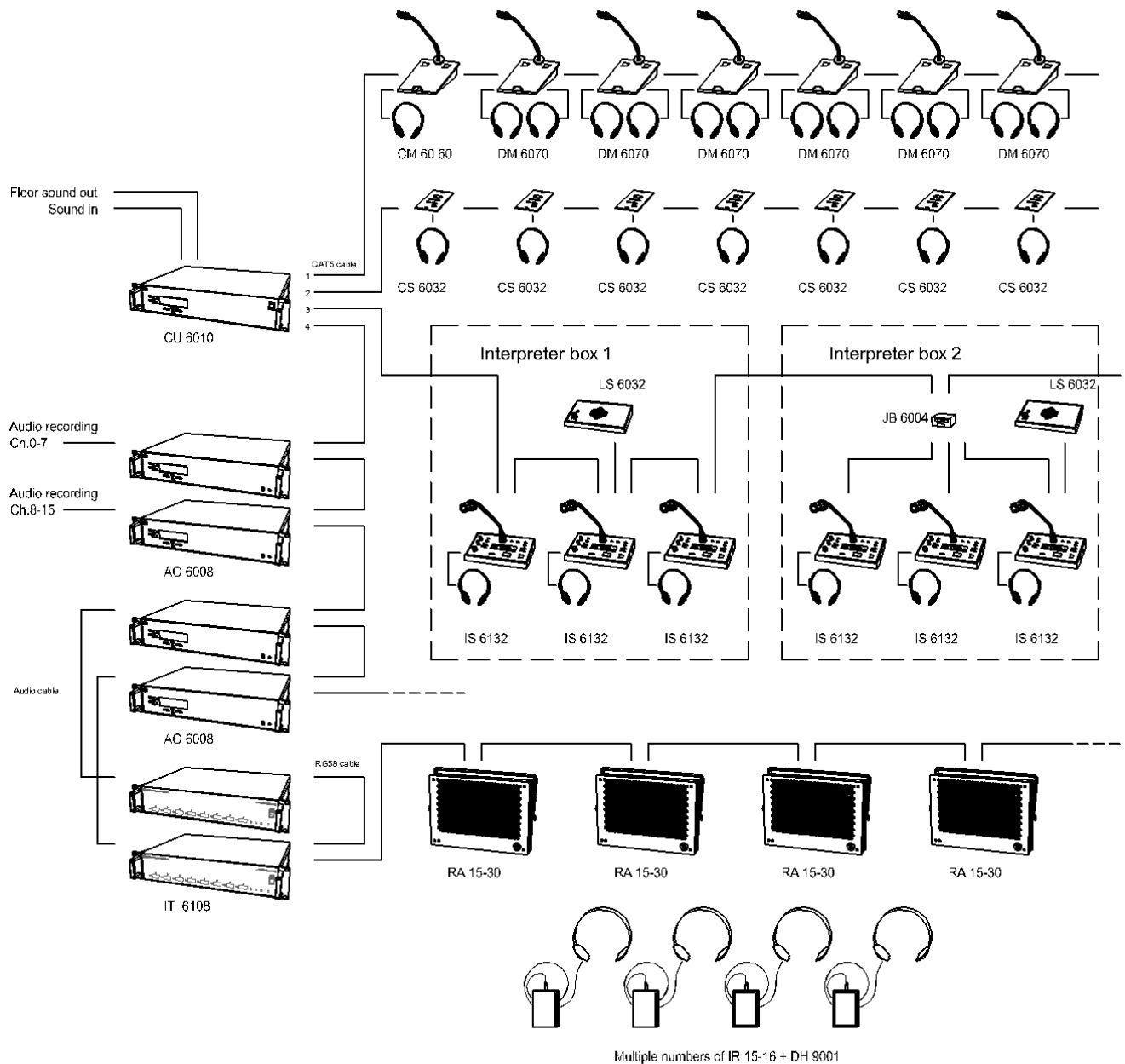
Check when signal is present to the channels, that the green LED is flashing indicating proper level to the channel.

If the LED is not flashing the sound level present on the Analogue Audio Line Input Connector is too low.

If the LED is lighting constantly the sound level present on the Analogue Audio Line Input Connector is too high.

System Setup

Typical schematics



Setting of audio level on AO 6008

When using the AO 6008 with the IT 6108 Infrared Transmitter, the audio output level on the AO 6008 has to be set to match the sensitivity on the transmitter.

The correct level to be set on each connected channel on the AO 6008 is -12db.

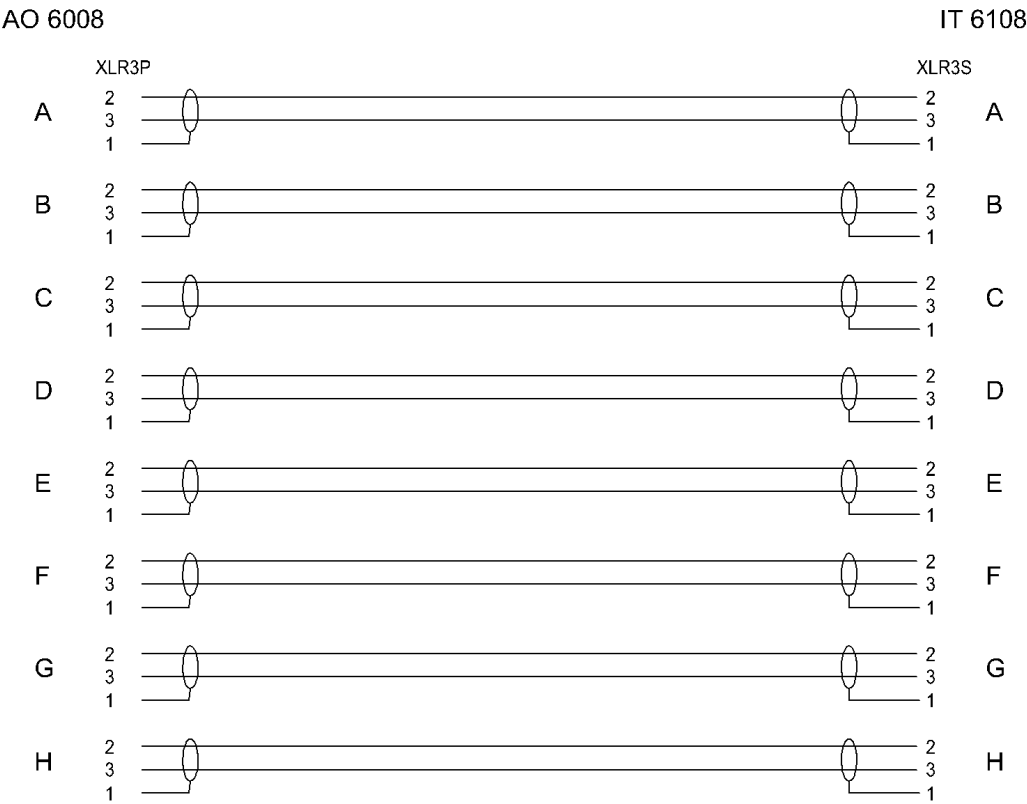
Appendix

Technical appendix

Cabling

All cabling between the IT 6108 and RA15xx Infra Radiators are RG58 Coax cable.

Connection between AO6108 and IT 6108:



Accessories (not supplied)

Audio Connection Cable:

2m, 3pin XLR, male/female	16 33 07101
5m, 3pin XLR, male/female	16 33 06223
10m, 3pin XLR, male/female	16 33 06994

CA 9000 RG58 Connection Cable 1 m.....	10 02 13101
CA 9000 RG58 Connection Cable 2 m.....	10 02 13201
CA 9000 RG58 Connection Cable 5 m.....	10 02 13501
CA 9000 RG58 Connection Cable 10 m.....	10 02 14102
CA 9000 RG58 Connection Cable 20 m.....	10 02 14202
CA 9000 RG58 Connection Cable 50 m.....	10 02 14502

Technical specifications

IR-section

Complies with the international standard IEC914

Distortion factor: < 1.0%

Signal-to-noise ratio: > 60dB

Channel separation: > 60dB

Number of channels: ..max. 8 (original +7 interpreter channels)

General

Power consumption max. 110VA

Mains voltage: 100 - 250V, 50...60Hz

Housing: Anodised black aluminium

Dimensions: 433x305x88,1mm (2HU)

Weight: ca. 5.8kg

Temperature to guarantee specified performance

.....5 Deg C. to 40 Deg C. (35 to 80% humidity)

Storage temperature

.....-20 Deg C. to 60 Deg C. (10 to 80% humidity)

Weight.....5,5 kg

Dimensions (W x H x D) 425 (483) x 87 x 317 (357) mm

dimensions in bracket are including 19" brackets

Accessories supplied.....User manual

..... Power cable

Connectors

Audio Input for the connection to AO 6008 Audio Output Unit.

.....8 pieces XLR3S

HF outputs.....2 pieces BNC

HF link.....1 pieces BNC

Specifications are subject to change without notice.